

CLAIMS

What is claimed is:

1. A semiconductor device comprising:
a fuse including an upper layer wiring layer;
a first protection film on the fuse; and
a second protection film on the first protection film, the second protection film including an opening section formed therein that exposes the first protection film;
the opening section exposing an entire portion of the first protection film located directly above the fuse.
2. A semiconductor device according to claim 1, wherein each of two end sections of the fuse is connected to a lower layer wiring layer through a via hole.
3. A method for manufacturing a semiconductor device, comprising:
a step of forming a fuse including of an upper layer wiring layer on an upper surface of an interlayer dielectric layer that is formed on a substrate;
a step of forming a first protection film on an upper surface of the interlayer dielectric layer and the fuse;
a step of forming a second protection film on an upper surface of the first protection film; and

a step of forming an opening section in the second protection film, the opening section exposing an entire portion of the first protection film located directly above the fuse.

4. A method for manufacturing a semiconductor device according to claim 3, further comprising the steps of forming via holes in the interlayer dielectric layer, and connecting two ends of the fuse to a lower layer wiring layer through the via holes.

5. A semiconductor device comprising:
a substrate;
a fuse disposed on the substrate, the fuse including an upper layer wiring layer;
a first protection film disposed on the fuse; and
a second protection film disposed on the first protection film, the second protection film including an opening formed therein exposing the first protection film;
the opening section having a width at least equal to a width of the fuse.

6. The semiconductor device of claim 5 wherein said opening section extends outboard of said fuse.

7. The semiconductor device of claim 5 wherein said opening section includes bottom end portions outboard of said fuse.